

ADWR Groundwater Modeling Projects 1989 – 2005

Date	Model	Description	Model Reports and Links to PDF files
1989	Pinal AMA Groundwater Flow Model	2-layer (UAU, MSCU +LCU), 39 R x 47 C (cells approx. 1 mi. ²). Covers groundwater basin portions of Maricopa-Stanfield and Eloy sub-basins. Calibration includes steady-state (predevelopment) and transient (1985-1988). USGS Modflow-88 code.	<ADWR modeling report Number 1 (1989)> <ADWR modeling report Number 2 (1990)> <ADWR modeling report Number 4 (1992)>
1990	Indian Bend Wash Groundwater Flow and Contaminant Transport Model	12-layer (UAU, MAU, LAU), 41 R x 24 C (cells vary from 1,320 to 2,640 feet in length). Covers Indian Bend Wash Superfund site study area (Southern Scottsdale). Calibration includes steady-state (predevelopment circa 1900) and transient (1983-1988). Dames and Moore Target 3ds proprietary code.	ADWR –NIBW modeling report (1990)
1992	Central Phoenix Groundwater Flow and Contaminant Transport Model	17-layer (UAU, MAU, LAU), 36 R x 42 C (cells vary from 1,320 to 2,640 feet in length). Covers central Phoenix portion of West Salt River Valley sub-basin. Transient calibration (1983 to 1989). Dames and Moore Target 3ds proprietary code.	ADWR – CPHX modeling report (1992)
1992	Phoenix Goodyear Airport Groundwater Flow and Contaminant Transport Model	7-layer (A, B, and C subunits of UAU), 46 R x 87 C (cells vary from 200 to 1,000 feet in length). Covers Phoenix Goodyear Airport Superfund site study area. Transient calibration (1978 to 1987). Dames and Moore Target 3ds proprietary code.	<ADWR modeling report Number 5 (1992)>
1993	Salt River Valley (Phoenix AMA) Groundwater Flow Model	3-layer (UAU,MAU,LAU), 62 R x 90 C (cells are 1 mi. ²). Covers groundwater basin portion of East and West Salt River Valley sub-basins. Calibration includes steady-state (predevelopment circa 1900) and updated transient (1983-2002). USGS Modflow-2000 code.	<ADWR modeling report Number 6 (1993)> <ADWR modeling report Number 8 (1994)> <ADWR modeling report Number 11 (1996)> <ADWR SRV model update memo (12/1/04)> <ADWR East Valley Water Forum report (1/05)>
1993	Yuma Area Groundwater Flow Model	4-layer (Yuma Mesa, flood plain alluvium, coarse gravel and upper Wedge zones), 86 R x 85 C (cells vary from 1,320 to 5,280 feet in length). Covers Yuma Mesa and Yuma Valley areas in Arizona, California and Mexico. Calibration includes steady-state (1978) and transient (1978-1989). USGS Modflow-88 code.	<ADWR modeling report Number 7 (1993a)> <ADWR modeling report Number 7 (1993b)>
1995	Prescott AMA Groundwater Flow Model	2-layer (UAU, LVU), 48 R x 44 C (cells are .5 mi. ²). Covers groundwater basin portion of Little Chino and Upper Agua Fria sub-basins. Calibration includes steady-state (predevelopment circa 1940) and transient (1940-1998). USGS Modflow-88 code.	<ADWR modeling report Number 9 (1995)> <ADWR modeling report Number 12 (2002)>
1996	Upper San Pedro Groundwater Flow Model	3-layer (Floodplain alluvium, basin-fill, conglomerate unit), 72 R x 67 C (cells vary from 660 to 1,320 feet in length). Covers groundwater basin portion of Upper San Pedro sub-basin. Calibration includes steady-state (predevelopment circa 1940) and transient (1940-1990). USGS Modflow-88 code.	<ADWR modeling report Number 10 (1996)>
2005	Tucson AMA Groundwater Flow Model (to be released 8/2005)	3-layer (Ft. Lowell, Tinaja, Pantano Fms.), 130 R x 100 C (cells are .5 mi. ²). Covers groundwater basin portions of Upper Santa Cruz (Tucson) and Avra Valley sub-basins. Calibration includes steady-state (circa 1940) and transient (1940-2000). USGS Modflow-2000	<ADWR modeling report Number 13 (2005)> Will be available in 8/2005
Ongoing	Santa Cruz Groundwater Flow Models	Two 3-layer models (Flood plain alluvium, older alluvium and Nogales Fm.) of the Santa Cruz AMA currently under development.	To be released at a later date.